



# Integrated Systems for Energy

**Presentation to NREL 16th Industry Growth Forum  
19 November 2003**

**LARKSPUR CAPITAL  
CORPORATION**

# ISE CORPORATE OVERVIEW



- **ISE is a leading supplier of control systems, software for large hybrid-electric vehicles (buses and trucks)**
- **Leveraging of controls IP and strategic partnerships allows ISE to sell complete hybrid systems**
- **\$16M in revenues from inception (1995) to mid-2003**
- **With first large scale order in 2003, ISE has \$20M in firm business (2004-2008) plus ~\$20M in options**
- **ISE seeks \$10M investment to help finance transition to large scale assembly and sale of drive systems**

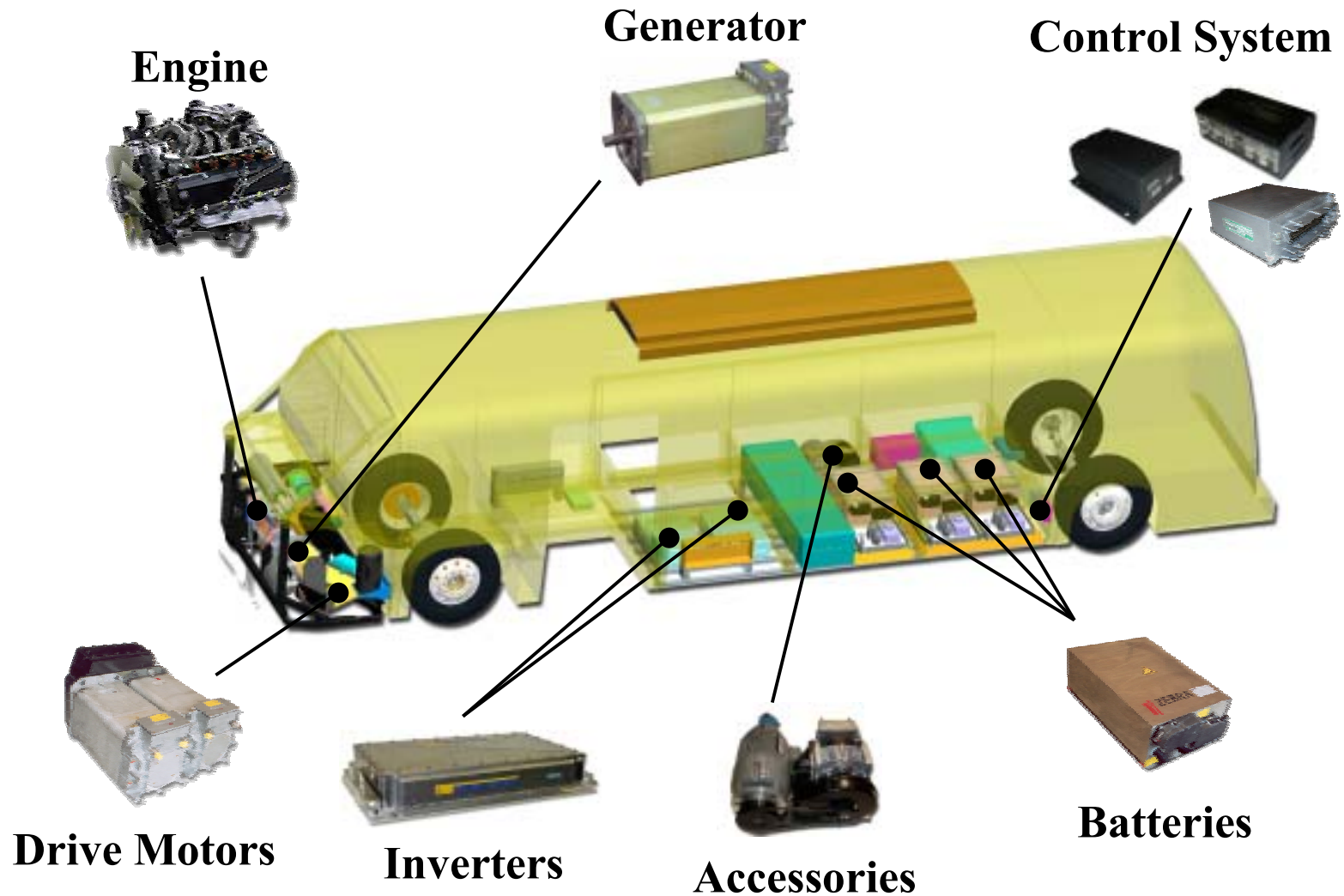
# MANAGEMENT TEAM AND BOARD



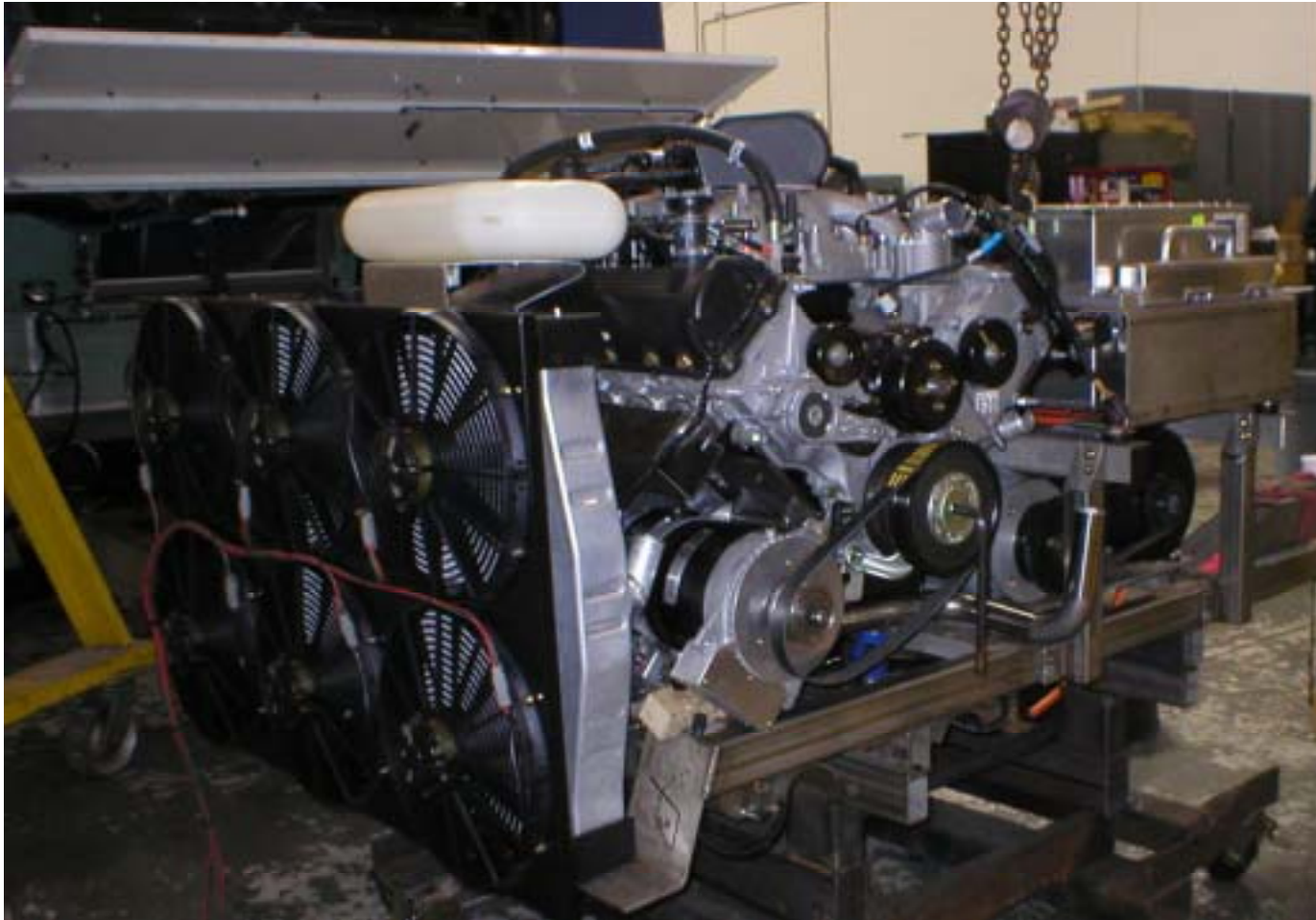
<b>Name</b>	<b>Position</b>	<b>Experience</b>
Michael Simon	Chairman	ISE, General Dynamics, NASA
David Mazaika	President	ISE, General Dynamics
Matthew Umbs	Controller	Arthur Andersen
Juergen Schulte	Chief Engineer	R.W.E.A.G. (German utility)
Paul Scott	Chief Scientist	ISE, JPL, MIT, Caltech

<b>Director</b>	<b>Experience</b>
William Owens	Co-CEO and Vice Chairman of Teledesic Inc.; Former Vice Chairman of Joint Chiefs of Staff
David Goodman	Chairman, CEO of United American Energy Corp.
Mark Quallen	Former Principal Court Street Investments; Former Co-Founder, President and CEO of Hydra Development Group

# HYBRID DRIVE SYSTEM COMPONENTS

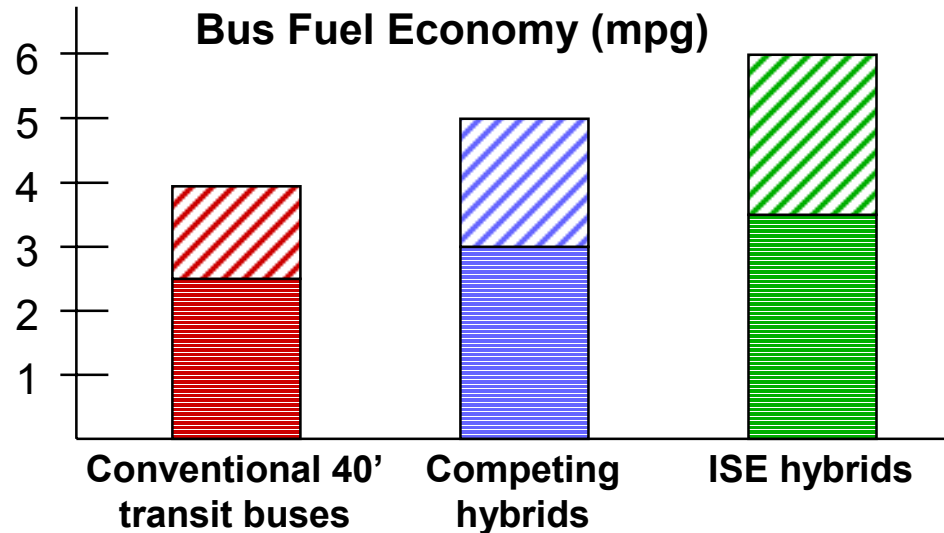


# ISE DRIVE SYSTEM PACKAGING For Large Scale Production

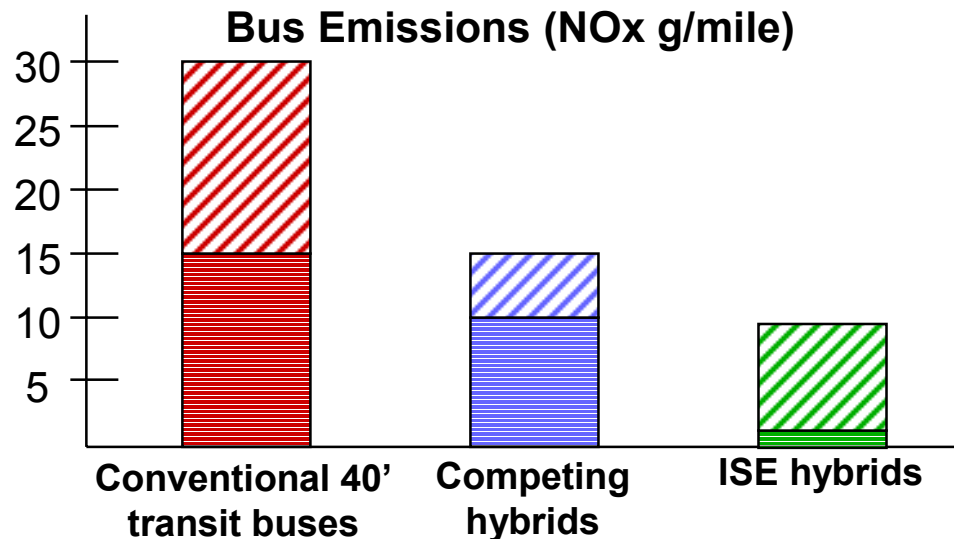




# MARKET NEED



- An ISE hybrid bus can save up to 8,000 gallons of fuel per year — \$12,000 in annual cost savings
- Hybrids also offer significant maintenance savings and performance benefits



- Hybrid buses offer dramatic emissions reductions
- ISE hybrids have lower emissions than competing hybrids because of advanced engine controls



## ADDRESSABLE U.S. MARKET

Type of Vehicle	Annual U.S. Sales (Approx)	Expected Average ISE Revenue per Vehicle	Total Annual Revenue Potential
Transit Buses	8,000	\$150,000	\$1.2 Billion
Heavy Military Trucks	10,000	\$200,000	\$2.0 Billion
Short Haul Class 7 and 8 Trucks	50,000	\$100,000	\$5.0 Billion
Other Types of Buses (e.g. School Buses, Touring)	100,000	\$75,000	\$7.5 Billion
<b>Total Annual Sales</b>	<b>168,000</b>		<b>\$15.7 Billion</b>
International Market	?	?	?xxx Billion



# COMPETITIVE ASSESSMENT



Competitors	ISE Competitive Advantages
<b>“First tier” suppliers</b>	<ul style="list-style-type: none"><li>• ISE offers multiple choices of fuels (diesel, gasoline, hydrogen, natural gas) — competitors offer only diesel</li><li>• ISE’s architecture more flexible, offers more options</li><li>• ISE’s control system more technologically advanced; offers better performance (fuel economy, emissions)</li><li>• ISE noted for customer responsiveness</li></ul>
<b>“Second tier” suppliers</b>	<ul style="list-style-type: none"><li>• ISE has more total system expertise, is not locked into specific, unproven components</li><li>• ISE has far more experience in its target heavy-duty vehicle market</li><li>• ISE the only small firm achieving high volume sales to major vehicle manufacturers</li></ul>



# CUSTOMERS / STRATEGIC PARTNERS



**New Jersey Transit  
AC Transit  
Sunline transit  
LADOT  
Hydrogenics  
City of San Bernardino  
U.S. DOT  
General Motors  
Long Beach Transit  
US Air Force  
NorCal Waste  
United Airlines**

**New Flyer Industries  
Motor Coach Industries  
Thor Industries  
Van Hool  
PACCAR Corp.  
Gillig Corp.**

**Siemens  
Maxwell Technologies  
AQMD  
CALSTART  
Tranelectric  
United Technologies Corporation  
California Air Resources Board  
US Army (TACOM)  
Cummins Engine Co.  
FORD Power Products**

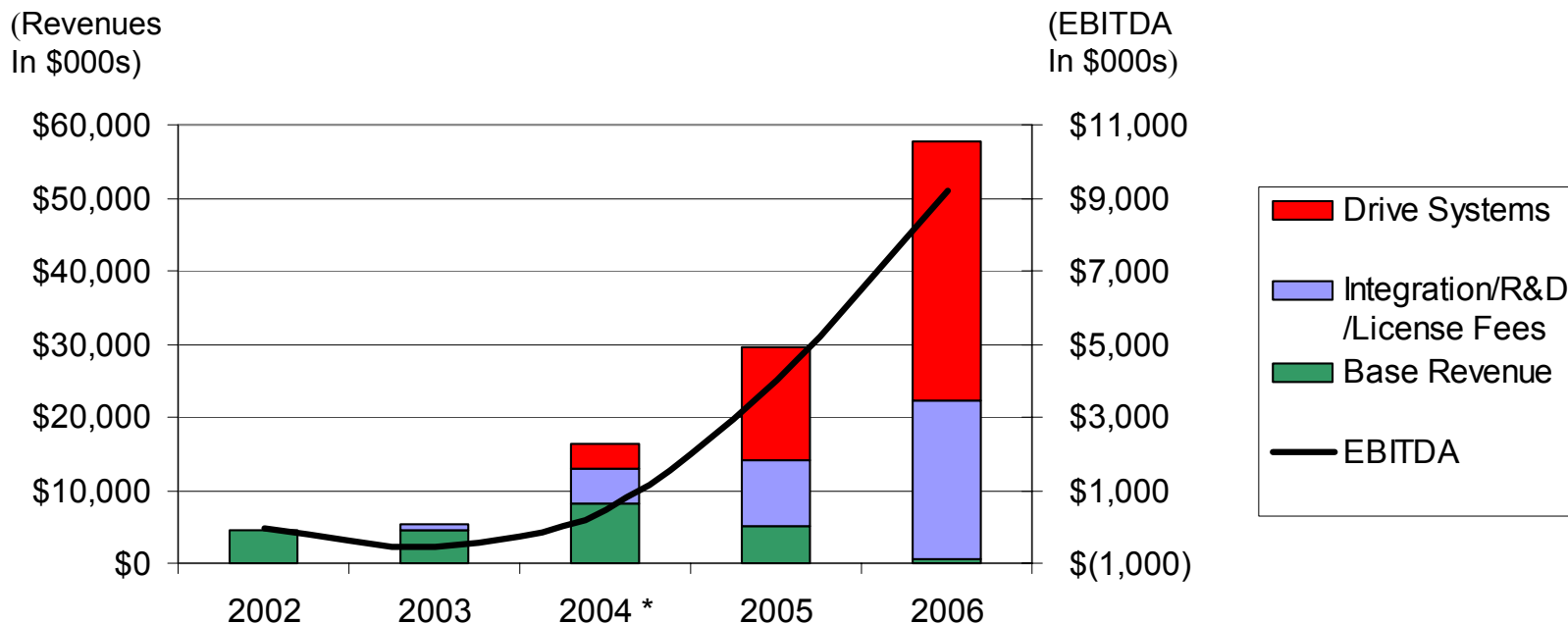
**CUSTOMERS**

**STRATEGIC PARTNERS**



# FINANCIAL SUMMARY

## Revenue and EBITDA Projections



•Base revenue in 2004 includes existing contracts plus initial Long Beach order

## Principal Uses of Proceeds

1. Working capital to enable ramp-up of drive system production
2. Sales and marketing, including expanded participation in trade shows
3. R&D and testing, including government certification of ISE systems



## WHY INVEST IN ISE?

- **ISE is a proven force in the hybrid market with \$40M in backlog and options, and \$100M+ in other targets**
- **Large market driven by large economic benefits, air regulations, and geopolitical forces (imported oil)**
- **Experienced and exceptionally talented team backed by major strategic partners such as Siemens, Ford, Cummins, and United Technologies**
- **Funds to be used for expansion and production of proven products, not risky new developments**



# Transportation For a Clean Planet



**Leadership, Opportunity, Responsibility**